

NEW GENUS AND NEW SPECIES OF MICTINI (HEMIPTERA: COREIDAE) FROM AUSTRALIA¹

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ABSTRACT: *Canungrantmictis*, new genus, and *C. morindana* new species from Australia are described, illustrated, and assigned to the tribe Mictini (Coreidae).

O'Shea and Schaefer (1980) reviewed the generic status of the tribe Mictini (Coreidae) for Asia and Australia, and indicated (pp. 222 and 249) that in a forthcoming work, a new genus from Australia would be described. Unfortunately their description was never published, and that taxon is still in need of a name, described herein as *Canungrantmictis morindana*.

Only two genera and three species of Mictini have been described from Australia. The genus *Mictis* Leach contains two species, *M. caja* Stål and *M. profana* (Fabricius), and *Pternistria* Stål includes only one species, *P. bispina* Stål (O'Shea and Schaefer, 1980). The present paper adds one new genus and one new species. Four morphological features characteristic of this new genus are the fore tibiae externally sulcate and internally slightly dilated, middle tibiae whole cylindrical and sulcate, humeral angles strongly nodulose to serrate, and the apex of scutellum with small but distinct tubercle.

Acronyms for type depositories: Colección Entomológica, Instituto de Biología, Universidad Nacional Autónoma de México (UNAM), and Queensland Museum, South Brisbane, Australia (QMBA).

All measurements are given in millimeters.

Canungrantmictis Brailovsky, NEW GENUS

Description. Head. Wider than long across eyes, subquadrate, and dorsally flat; tylus unarmed, barely raised, extending anteriorly to juga; juga unarmed, thickened, and shorter than tylus; antenniferous tubercles situated close together, internal lobes raised, projecting anteriorly and rounded apically; antennal segment I robust, thickest, with short and blunt tubercles and more than twice longer than head; segments II and III cylindrical, slender; segment IV fusiform; antennal segment III the shortest; segments I, II and IV variable: segment II always longer than I, but shorter or longer than IV and IV longer or shorter than I; ocelli close to eyes; preocellar pit deep; eyes hemispherical, protuberant; postocular tubercle small; buccula rounded, raised, short, entire, not projected beyond eyes; rostrum short, reaching posterior margin of mesosternum.

Thorax. Pronotum. Wider than long, moderately declivous, barely punctate and striate; collar narrow; frontal angles blunt or with tiny conical tubercles; anterolateral margins coarsely spinate with short and large stout spines; humeral angles exposed, elevated, strongly developed, elongated, turning upward, apically subacute, and almost reaching the apex of head; humeral margins strongly nodulose to serrate; posterolateral and posterior margin straight and smooth; callar region weakly marked, separated along midline by shallow longitudinal depression; metathoracic peritreme opening placed laterally, with anterior lobe globose, reniform, and posterior lobe sharp, small.

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Legs. Coxae and trochanter unarmed; fore and middle femora slightly incrassate, surface densely tuberculate, and each tubercle small, ventrally with large subdistal spine, and apical third emarginate; hind femur markedly incrassate, surface scattered with small tubercles, ventrally with large subdistal spine, subbasally with short and irregular broad spines, and apical third emarginate; fore tibiae externally sulcate, and internally slightly dilated; middle tibiae cylindrical, sulcate; hind tibiae of both sexes dilated; both dilations lanceolate; undilated portion unarmed and sulcate; inner margin nodulose. Male: outer expansion occupying 61.10% of total length of hind tibiae, width equal than inner dilation; inner dilation occupying 78.59% of total length of hind tibiae, with large spine-like tooth at apical third. Female: outer dilation occupying 63.66% of total length of hind tibiae, width slightly shorter than inner dilation; inner dilation occupying 72.58% of total length of hind tibiae, with two short and blunt spines at apical third.

Scutellum. Wider than long, triangular, flat, conspicuously punctate, and transversely striate; apex with small but distinct tubercle.

Hemelytra. Macropterous, reaching posterior margin of last abdominal segment; apical margin clearly sinuated; apical angle slightly extending beyond middle third of membrane; costal margin with anterior third straight, and middle and posterior third gradually convex; corium and clavus finely punctate.

Abdomen. Upper margin of connexival segments III to VI crenulate, with short acute spines; abdominal sternite unarmed, without spines or tubercles.

Male genitalia. Genital capsule. Posteroventral margin entire, thickest, laterally with broad medium-sized lobes (Fig. 1). Parameres. Heavily sclerotized; body relatively slender; anterior lobe convex, continuous with body; posterior lobe ending in a short and slender projection; space between posterior lobe and body wide and indented (Figs. 2-3).

Female genitalia. Abdominal sternite VII with fissura and plica, the latter triangular, sharply angulate, and reaching middle third; gonocoxae I enlarged anteroposteriorly, with upper margin concave, and inner margin convex; paratergite VIII rectangular, spiracle visible; paratergite IX quadrate, shorter than paratergite VIII.

Etymology. Named for J. A. Grant and for its occurrence on Canungra (Queensland, Australia).

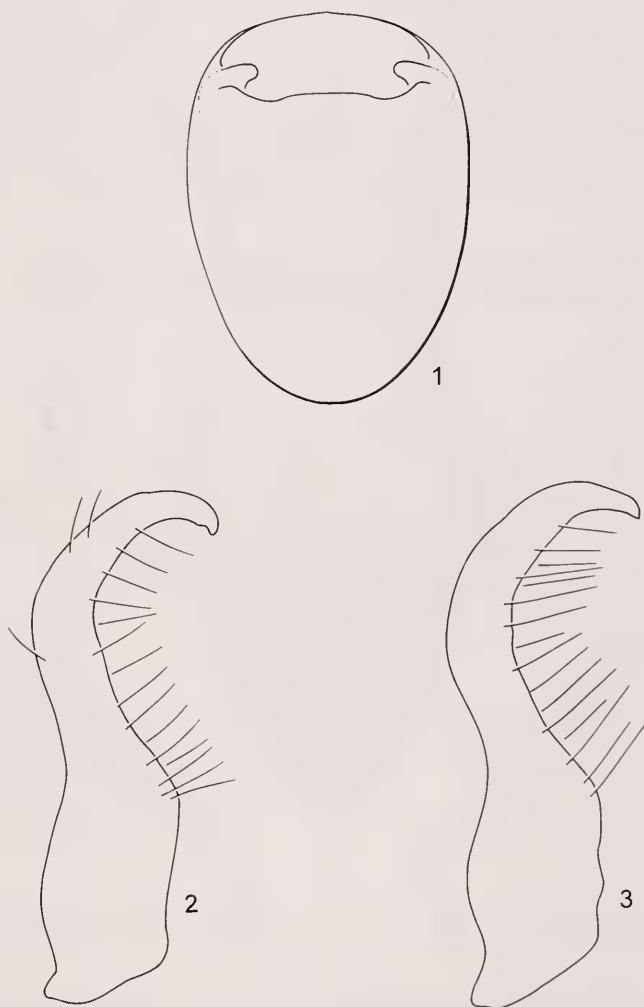
DISCUSSION

The tubercle at the apex of the scutellum occurs in three genera of Asian and Australian Mictini: *Helcomeria* Stål recorded from Bangladesh and India; *Molipteryx* Kiritshenko from Assam, Burma, Buthan, China, Japan, Korea, Malaya, and North India; and *Canungrantmictis* Brailovsky new genus, known from Australia.

In *Helcomeria* and *Canungrantmictis* the hind tibiae of both sexes are internally and externally dilated, whereas in *Molipteryx* only the internal face is slightly dilated in males and wholly cylindrical in females.

Canungrantmictis differs from *Helcomeria* by the following set of characters: hind femur with small tubercles and with outer surface slightly and uniformly emarginated; fore tibiae externally sulcate and slightly dilated internally; middle tibiae wholly cylindrical and sulcate; pronotal disc without midline of transverse tubercles; humeral angles exposed, strongly elevated, turning upward, apically subacute, almost reaching the apex of head; and anterior lobe of metathoracic peritreme globose, reniform, and small. In *Helcomeria* the hind femora are conspicuously armed with large tubercles across

the surface, with triangular expansion at apical third; outer margins of fore and middle tibiae distinctly dilated; pronotal disc with line of narrow transverse tubercles across midline and posterior to callar region; humeral angles broadly produced laterally; and anterior lobe of metathoracic peritreme conspicuously developed into a large circular expansion.



Figures 1-3. *Canungratmictis morindana* Brailovsky. 1. Male genital capsule, caudal view. 2-3. Parameres

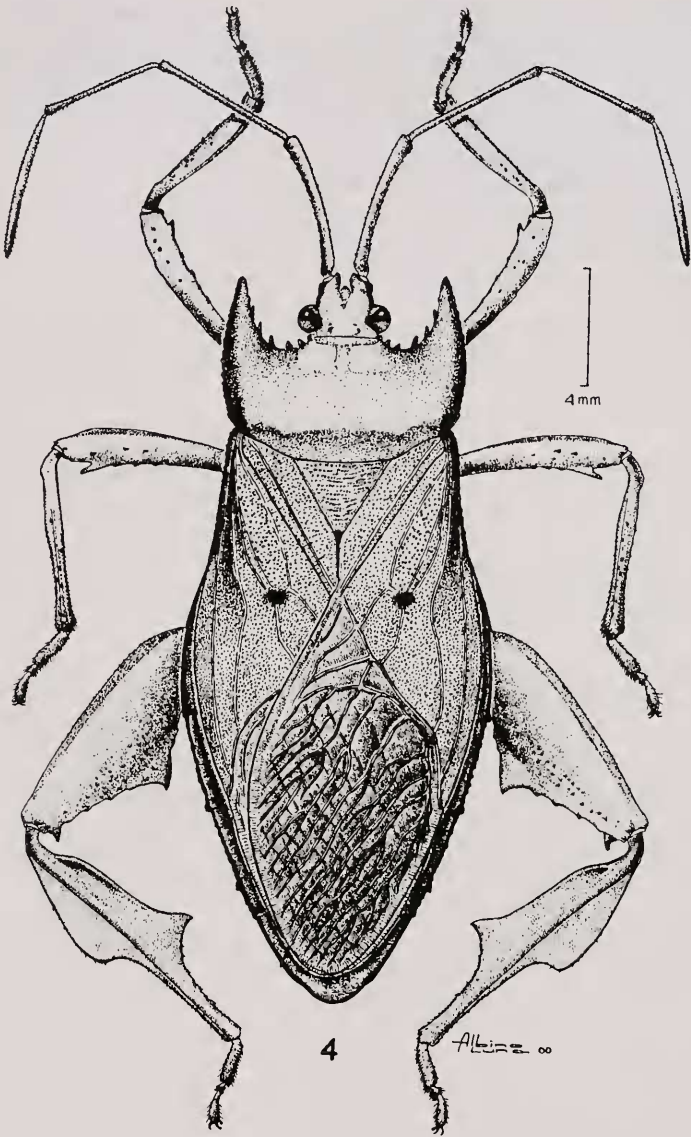


Figure 4. *Canungrantmictis morindana* Brailovsky, dorsal view.

Canungrantmictis morindana Brailovsky, NEW SPECIES

Description. Male. Dorsal coloration. Pale ochre yellow, with following areas black: longitudinal stripe between antenniferous tubercle and eye, spines of anterolateral margin of pronotum, margin of humeral angles, anterior third of costal margin, and large discoidal spot at middle third of endocorium; antennal segment I ochre yellow with black tubercles; segments II and III with outer surface pale orange and inner surface pale yellow; segment IV reddish brown with bright orange reflections, and basal joint bright orange red; hemelytral membrane pale ambarine; connexival segments bright black with inner margin orange to red; abdominal segments pale brown with ochre, yellow and vivid shiny orange- red reflections irregularly mixed across the surface. **Ventral coloration.** Head including rostral segments I to IV, thorax and legs dirty ochre yellow with following areas black: apex of rostral segment IV, tubercles and most of the spines of each leg, mesosternum and metasternum, scattered and diffused marks on propleura, mesopleura and metapleura, a discoidal spot at anterior margin of metapleura, lateral third of anterior lobe and posterior lobe of metathoracic peritreme, and anterior third of external surface of hind femur and hind tibiae; posterior third of hind tibiae and hind tarsi with pale orange reflections; abdominal sterna dirty ochre yellow sprinkled with dark brown spots across the surface; abdominal spiracles III to VII pale creamy yellow, delineated with black rings.

Female. Coloration. Similar to male. Connexival segments VIII and IX, and abdominal segments VIII and IX dark brown to black with ochre yellow and dull orange reflections; genital plates dirty ochre yellow with outer margin of paratergite VIII and IX and numerous spots scattered across the surface black.

Variation. 1- Head dorsally, pronotal disc, scutellum, clavus and corium pale orange. 2- Antennal segments II to IV pale yellow. 3- Antennal segment I with outer face pale orange and inner face pale yellow. 4- External angle of mesopleura with or without creamy yellow callosity. 5- Mesosternum and metasternum ochre yellow or pale orange, sprinkled with dark brown to black spots. 6- Tarsi pale yellow or black, or pale orange or mixture of yellow, orange and black.

Measurements. Male first, then female. Head length 1.59, 1.82, width across eyes 2.66, 2.90, interocular space 1.39, 1.59, interocellar space 0.67, 0.80; length of antennal segments: I, 4.78, 5.47, II, 5.09, 5.50, III, 4.19, 4.63, IV, 5.16, 5.19. Pronotum: Length 4.78, 6.30, maximum width 7.60, 8.58. Legs: Hind tibiae, total length 9.95, 11.09, length outer dilation 6.08, 7.06, width outer dilation 1.06, 1.21, length inner dilation 7.82, 8.05, width inner dilation 1.06, 1.29. Scutellar length 2.66, 3.26, width 3.19, 3.95. Total body length 25.18, 30.45.

Type material. Holotype: ♂, Australia: South East Queensland, Curtis Farm, Canungra, 30-III-1985, on *Morinda jasminoides* A. Cunn (Rubiaceae), G. B. Monteith (QMBA). Paratypes. Australia: 1 ♂, same data as holotype (QMBA); 2 ♂, 1 ♀, South East Queensland, Curtis Farm, 5 km S of Canungra, 3-III-1985, 8-IV-1990, G. B. Monteith (QMBA, UNAM); 1 ♀, South East Queensland, "Glen Witheren", Canungra, 2-II-1989, G. B. Monteith (UNAM); 1 ♀, Hellhole George, Carnarvon National Park, 27-III-1993, J. Grigg (UNAM); 1 ♀, Kooraminy, Carnarvon National Park, 27-III-1993, J. Grigg (QMBA); 1 ♂, New South Wales, 3 km N Lansdowne, via Taree, 27-IX-1987, G. Williams (QMBA).

Etymology. Named for the host plant on which this new species was collected.

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LITERATURE CITED

O'Shea, R. and C. W. Schaefer. 1980. A generic revision of the Asian and Australian Mictini (Heteroptera: Coreidae). *Oriental Insects* 14: 221-251.